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ACCEPTANCE

This dissertation, PROFESSIONAL LEARNING COMMUNITIES AND TEACHER DECISION-MAKING, by MICHAEL C. BARR, was prepared under the direction of the candidate's Dissertation Advisory Committee. It is accepted by the committee members in partial fulfillment of the requirements for the degree, Doctor of Education, in the College of Education and Human Development, Georgia State University.

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PROFESSIONAL LEARNING COMMUNITIES AND TEACHER DECISION-MAKING

by

MICHAEL C. BARR

Under the Direction of Jami Royal Berry

ABSTRACT

Professional learning communities (PLCs) have been adopted and implemented in many schools as a strategy for ensuring teacher capacity building, job-embedded professional learning, improved teacher effectiveness, and data-driven decision-making for the selection and use of instructional strategies. The focus of this study was on the latter; decision-making regarding the selection and use of instructional strategies. This qualitative study investigated how teachers who are members of professional learning communities described their ability to utilize their decision-making skills in the selection and use of strategies to improve instruction. The study included individual interviews, observations, and artifact analysis. The site of the study was an elementary school (PreK-5) located in a suburban school district in which professional learning communities are utilized. Data were analyzed and compared to grounded principles from which informed conclusions were drawn. Findings from the several sources were compared to

principles that support theories about organizational change and adult-learning. Not only did study participants report having the autonomy to make decisions about instruction, but they perceived PLCs as a great forum for ensuring that they made the best decisions. Every study participant valued the opportunity to meet on a regular basis to discuss their work with colleagues to improve instruction. It is the critical link between adult learning and student learning that professional learning communities capitalize upon. Both teacher learning and student learning must be supported for a school to thrive. Four themes emerged from this study; (a) shared personal practice, (b) the cyclical nature of improving student learning outcomes, (c) collaboration, and (d) teacher autonomy in the selection of instructional strategies. The dissertation underscores the need for leaders to understand concepts related to organizational change and adult learning.

INDEX WORDS: Professional learning communities, Teacher decision-making, Educational leadership

PROFESSIONAL LEARNING COMMUNITIES AND TEACHER DECISION-MAKING

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MICHAEL C. BARR

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DEDICATION

This dissertation is dedicated to my wife, Hope, whose love, encouragement, and support made this possible. Although our discussions during the last few years have often included the topic of this research, she has remained patient, attentive, and interested. Her extensive knowledge of instructional practices and professional learning communities has been of great value to me in this process. I am fortunate to have her as my wife and best friend. I am also thankful for the support of my family and their understanding as I devoted time to this work.

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1 HOW PROFESSIONAL LEARNING COMMUNITIES AND TEACHER DECISION-MAKING CAN IMPROVE INSTRUCTION

The success of any organization rests largely on the ability of its people to adapt to change and ensure continuous improvement (Fullan, 2008). In the field of education, to adapt and improve is a necessity. Educational leaders need organizational strategies that support adaptability and continuous improvement efforts (Schmoker, 2006). Such strategies are needed for schools and other educational organizations to ensure that meaningful and expected learning opportunities are available to all students (Senge, et al., 2012). One way schools and other organizations can foster a culture of continuous improvement is by working to become a learning organization (Senge, et al., 2012). Senge (2006) defines learning organizations as,

organizations where people continually expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free, and where people are continually learning to see the whole together. (p. 3)

The learning organization model seems particularly well suited for schools (Senge, et al., 2012; Wiggins & McTighe, 2007). Senge (2012) explains,

schools can be made sustainably vital and creative, not by fiat or command or by regulation or forced rankings, but by adopting a learning orientation. This means involving everyone in the system in expressing their aspirations, building their awareness, and developing their capabilities together. (p. 5)

The cultivation of such a learning orientation offers an opportunity to embed professional learning and continuous improvement practices into the day-to-day life of a school (Evans & Dean, 2003).

The professional learning community (PLC) framework is compatible with the tenets of a learning organization, and it provides for the establishment of long-term goals and a structured way to improve instruction through a collaborative process (Wiggins & McTighe, 2007). Senge (2006) identified the following five principles as necessary components of effective learning organizations; (a) personal mastery, (b) mental models, (c) shared vision, (d) team learning, and (e) systems thinking. Personal mastery relates to self-improvement and the accomplishment of individual goals (Caldwell, 2012; Senge, 2012). Mental models recognize the need to examine our individual beliefs, values, and assumptions to ensure honest and productive dialogue (Senge, 2012). On a broader level, organizations must have a common purpose, a shared vision, to which people can commit (Senge, 2012). Team learning consists of groups collectively learning, setting goals, and solving problems (Senge, 2012). Systems thinking is about consideration of the whole rather than the parts (Caldwell, 2012). These components support PLCs and are foundational to establishing schools as learning organizations which can be a catalyst in uniting teachers and administrators in a way that underscores the necessity of collaboration and shared responsibility as a prerequisite for substantive improvement in schools (DuFour & Marzano, 2011; Schlechty, 2009).

The purpose of this dissertation was to gain an in-depth understanding of the perceptions of teachers participating in PLCs. The research examined the significance of PLCs in developing a school culture in which teachers and school administrators' work together to improve

instruction. PLCs should enhance the ability of classroom teachers to make decisions about instruction that improve student learning. Effective PLCs are dependent upon the ability of colleagues to work together and make decisions regarding instructional strategies (D'Ardenne, Barnes, Hightower, et al., 2013). The ability of teachers to make decisions about instruction that improve student learning was the primary focus of this study.

PLCs are touted as a school reform (transformation) strategy (DuFour & Reason, 2016). The premise is to transform schools into communities of learners who commit to improve student learning through collaboration and collective inquiry (Hord, 1997). When properly structured, the PLC framework is a mechanism for improving teaching and learning and increasing the capacity of individuals throughout a system (Ontario Principal's Council, 2009).

Guiding Questions

This dissertation provides an understanding of the link between participation in a high-quality PLC and the ability of teachers to participate meaningfully in the decision-making process related to the adoption and selection of instructional strategies utilized in their schools. Thus, a study of the perceptions of teachers about participation in PLCs and the selection and use of instructional strategies is of value to others contemplating the use of, or currently using a PLC framework. The following research questions guided the study:

1. How do fourth and fifth grade teachers describe the relationship between PLCs and collaboration and shared decision-making?
2. How do fourth and fifth grade teachers describe the process of collaboration and shared decision-making within PLCs?
3. How do fourth and fifth grade teachers describe the relationship between participation in a PLC and their ability to improve instruction?

4. How do fourth and fifth grade teachers describe the impact of PLCs on student learning within their school?

Review

Many thought leaders in education view learning communities as the best way, perhaps the only way, to markedly improve schools (DuFour & Fullan, 2013; DuFour & Marzano, 2011; Schlechty, 2009). Research suggests there is a link between improved teacher effectiveness and PLCs (Graham, 2007; Peppers, 2015; Poekert, 2012). An increasing number of research studies find that high-quality collaborative professional development opportunities, such as PLCs, can improve classroom instruction and student achievement (Banerjee, Stearns, Moller, & Mickelson, 2017; D'Ardenne, et al., 2013; Griffith, Massey, & Atkinson, 2013; Marsh, Bertrand, & Huget, 2015; Poekert, 2012; Ratts et al., 2015). Since a connection has been established between PLCs and improved classroom instruction, there is a need for educational leaders to explore and better understand the components of PLCs, the relationship between PLCs and improved teacher effectiveness, and how PLCs can be leveraged to create and sustain continuous improvement in classroom instruction in a systemic manner.

Introduction to the literature.

As with any successful organization, schools must have continuous improvement strategies embedded in the culture (Evans & Dean, 2003). Such strategies allow schools to be responsive to the learning needs of all students (DuFour & Marzano, 2011). This responsiveness to the needs of students is largely dependent upon an organizational framework that supports the ongoing development of staff and a culture which is relentlessly focused on student learning (DuFour & Marzano, 2011). Improving schools is contingent upon improving the people who

work in schools. As Ernest Boyer, an American educator who served as United States Commissioner of Education, shared in an interview,

When you talk about school improvement, you are talking about people improvement. That is the only way to improve school, unless you mean painting the building and fixing the floors. But that's not the school: it is the shell. The school is people, so when we talk about excellence or improvement or progress, we are really talking about the people who make up the building. (as cited in DuFour & Marzano, 2011, p. 15)

PLCs provide a framework for people improvement within schools. DuFour and Fullan (2013) assert, PLCs are “about everyone doing their part in two aspects: being as good as one can be during individual and collaborative work, and being aware that everyone needs to make a contribution to improving the larger system” (p.18). Accordingly, PLCs can be instrumental in developing both individual capacity and the collective capacity of the organization (Fullan, 2008). For these reasons, it is important for educators to recognize PLCs as a mechanism for ensuring school improvement.

Due to the broad nature of elements associated with PLCs, it is important to develop a framework to understand better how particular elements intersect with this study. The following three topics undergird this study and are integral to it:

- Conceptualizing and defining PLCs
- Characteristics of high-quality PLCs
- Teacher leadership and decision-making

In the ensuing review of literature, these topics are analyzed to provide the reader with the requisite information needed to understand fully and to engage meaningfully with the topics associated with this study.

Conceptualizing and defining professional learning communities.

Numerous definitions for PLCs now exist (DuFour & Marzano, 2011; Martin-Kniep, 2004; Schmoker, 2006; Servage, 2008). The two definitions below capture the broad notion of PLCs and underscore the need for teachers to be engaged in decisions regarding instructional practices and strategies. Servage (2008) explains,

The professional learning community is one model within a constellation of models and theories characterized by a number of core beliefs: (1) that staff professional development is critical to improved student learning; (2) that this professional development is most effective when it is collaborative and collegial; and (3) that this collaborative work should involve inquiry and problem solving in authentic contexts of daily teaching practices. (p. 63)

DuFour and Marzano (2011) define the PLC concept as “an ongoing process in which educators work collaboratively in recurring cycles of inquiry and action research to achieve better results for the students they serve” (p. 22). The first definition identifies three fundamental principles associated with PLCs (Servage, 2008). This is important when seeking to understand the components of PLCs and the interrelatedness of each component. It is the definition offered by DuFour and Marzano (2011); however, that will be embraced in this study due to its succinctness and its broad use and acceptance. This second definition informs us that PLCs serve to unite educators in seeking to improve teacher practice and student outcomes continuously through collaboration. Teachers working in isolation and disengaged from colleagues precludes

the development and sustainability of a collaborative culture in which instructional improvement can be embraced and allowed to flourish (Peppers, 2015; Schmoker, 2006). The PLC framework provides a theory and a practical way to establish an organizational structure and culture that supports continuous improvement and an organizational strategy that allows for it to be sustained.

Characteristics of high-quality professional learning communities.

In this section, the characteristics of high-quality PLCs are identified, and the importance of each is substantiated using relevant literature and research findings. Specific attention is given to shared leadership that is defined as the ability of teachers to participate in decision-making processes related to the selection of instructional strategies. As stated earlier, the PLC framework is a way to operationalize the learning organizational model in schools (Senge, et al., 2012). Thus, it is necessary to establish clearly the characteristics of a PLC so that there is a common framework of understanding for educational leaders, teachers, and others participating in learning communities. The Center for Comprehensive School Reform and Improvement (2009) identified the following commonly cited key characteristics of PLCs:

- Shared values and vision,
- Collaborative culture,
- Focus on examining outcomes to improve student learning,
- Shared personal practice, and
- Supports and shared leadership.

These characteristics are critical to high-quality PLCs (Hipp, Huffman, Pankake, & Oliver, 2008; Huffman, 2011). Further, the characteristics are aligned with the five dimensions of PLCs as

identified by Hord (1997). Hence, these characteristics will be used to guide the following review of the elements of high-quality PLCs.

Shared values and vision.

Because collaboration is foundational to PLCs, there is a need for the formation of shared values and vision (Eaker & Keating, 2012; Thompson, Gregg, & Niska, 2004). Shared values provide insight into how PLC participants should work together as a team and independently (Kouzes & Posner, 2002). Establishing core values must be a collaborative process (Kouzes & Posner, 2010). Values must be discussed and vetted to ensure they can be embraced by participants (Kouzes & Posner, 2002). Additionally, values must be evident in the vision, mission, and everyday decision-making practices of the organization. Shared values are needed to ensure that colleagues may work together in a collaborative and meaningful way (Kouzes and Posner, 2002; Thompson, Gregg, & Niska, 2004). PLCs are dependent upon the ability of teachers to form healthy and trusting working relationships (Kise, 2012). Articulating shared values is an important part of establishing such working relationships.

Senge (2006) writes, “The practice of shared vision involves the skill of unearthing shared ‘pictures of the future’ that foster genuine commitment and enrollment rather than compliance” (p. 9). Participants must also have a voice in defining the vision if the time and work of the PLC is to be valued (Doolittle, Sudeck, & Rattigan, 2008; Kise, 2012). In an article about the establishment of PLCs in a middle school, it was reported that school staff decided that to succeed, all stakeholders (in the school and the community) needed a unifying vision to ensure commitment to an overarching goal of student learning and achievement (Thompson & McKelvy, 2007). A unifying call to action based on the values of the learning community is needed to ensure PLC participants understand the need for the collaboration (Eaker & Keating,

2012). A shared vision also lets PLC participants know why the work must be done and provides clarity about the primary goals. Building consensus around a common vision can be a time-consuming task, but doing so creates a culture in which the time devoted to professional learning is valued and considered necessary to improving instruction and increasing student achievement (Kise, 2012).

Collaborative culture.

The establishment of a shared vision as described earlier and the presence of a collaborative culture set the stage for what Fullan (2008) calls “purposeful peer interaction” (p. 41). This type of collaboration is a fundamental component of effective learning communities. Palmer (1998) offers,

Involvement in a community of pedagogical discourse is more than a voluntary option for individuals who seek support and opportunities for growth. It is a professional obligation that educational institutions should expect of those who teach – for the privatization of teaching not only keeps individuals from growing in their craft but fosters institutional incompetence as well. (p. 148)

The importance of collaboration and participation in learning communities is based on the belief that teachers are knowledge workers who cannot be dependent upon others for directions about how to do the job, but must be able to use their own intellect and skills to respond to the instructional needs of students (Lieberman & Miller, 2011).

An article in the *National Journal for Publishing and Mentoring Doctoral Student Research* reported that collaboration among colleagues is requisite to improving pedagogical practices (Huges & Kristonis, 2006). Teague and Anafara (2012) note, “Collective learning and application to practice has been found to promote seeking answers to questions about what

students need to learn, how we will know it has been learned, and how we will act when students struggle” (p. 61). Collaboration is a distinguishing characteristic of PLCs (DuFour, 2004). Eaker and Keating (2012) assert,

For collaborative teams to be successful in their efforts to improve student learning, the learning of adults must be embedded into both the structure and culture routine of the district, and most important, reflected in the day-to-day work of each collaborative team. (p. 140)

PLCs provide such a structure and can support the development of a collaborative culture (Eaker & Keating, 2012; Gee & Whaley, 2016).

In PLCs, teachers have the opportunity collectively to assess teaching practices and strategies and engage in learning in a cyclical process that supports and leads to better teaching and increased student achievement (DuFour, 2004; Goddard, Goddard, & Tschannen-Moran, 2007; Hughes & Kristonis, 2006; Vescio, Ross, & Adams, 2008). Senge (2012) shares,

Through such techniques as dialogue and skillful discussion, small groups of people transform their collective thinking, learning to mobilize their energies and actions to achieve common goals and draw forth an intelligence and ability greater than the sum of individual members’ talents. (p. 8)

Thus, teacher collaboration harnesses the power of all teachers, in all disciplines, in a concerted effort to improve learning opportunities for students (DuFour, 2004; Battersby & Verdi, 2015). PLCs require a high level of collaboration among participants (Huges & Kristonis, 2006).

Organizational structure refers to how people, groups, and teams are organized to get the work done (Bolman & Deal, 2013). Traditional vertical organizational structures in schools permit teachers to close the classroom door and work in isolation (Eaker & Keating, 2012;

Schmoker, 2006). Conversely, PLCs are founded on the notion that teachers must work together in a collaborative way to improve instruction (Eaker & Keating, 2012). PLCs are lateral organizational structures that allow for collaboration through reliance on teams to guide the work utilizing participatory decision-making processes (Gray, Mitchell, & Tarter, 2014). School improvement requires such collaborative structures at all levels of the educational system (Schmoker, 2006). It is the collaborative component of PLCs that can help teachers to develop a greater knowledge base about teaching and learning, refine instructional practices, set instructional goals, and engage in meaningful conversations about student learning in their effort to increase student achievement (Popp & Goldman, 2016).

Focus on examining outcomes to improve student learning.

The goal of PLCs is to improve student learning outcomes (DuFour & Fullan, 2013; Eaker & Keating, 2012; Schmoker, 2006). PLCs are intended to provide the necessary supports for enhancing students' learning opportunities (Zepeda, 2008). PLCs must be unceasingly focused on student learning and achievement (DuFour & Fullan, 2013). PLC participants must become adept at reviewing and interpreting data, constructing instructional strategies that appropriately respond to the needs of students, and ensuring the use of relevant and appropriate instructional practices (Adams, Ross, & Vescio, 2008; Brown, 2016). It is this review of student learning outcomes that allows teachers to gauge the success of lessons and strategies (Duke, Cervetti, & Wise, 2016; Popp & Goldman, 2016). Discussion with colleagues about student outcomes ensures a student-centered approach to instruction in which teachers work to improve pedagogical practice (Little & Horn, 2007). As Zepeda (2008) asserts, the power of data is increased through work that explores its meaning.

The importance of collaboratively assessing instructional practices is substantiated by eleven research studies which revealed evidence of improved student achievement when the teachers participated in teams or learning communities that focused on student learning outcomes and pedagogical strategies (Adams, Ross, & Vescio, 2008). As evidenced by these studies, PLCs provide a mechanism for evaluating student learning outcomes, instructional processes, and instructional strategies in an ongoing manner which allows for adjustments and changes as needed (Marsh, Bertrand, & Huget, 2015; Thompson, Gregg, & Niska, 2004). PLCs allow for the collegial dialogue needed to leverage the pedagogical expertise of all participants in a PLC (Marsh, Bertrand, & Huget, 2015). Moreover, PLCs strengthen the needed connection between student learning and professional learning for teachers (Adams, Ross, & Vescio, 2008).

Shared personal practice.

Learning communities provide teachers with a forum to work with other teachers to improve their own teaching effectiveness (Marsh, Bertrand, & Huget, 2015; Zepeda, 2008). Linder, Post, and Calabrese (2012) explain that teachers should embrace opportunities to study topics that are of interest. A PLC provides a time and a place for colleagues to study topics that are relevant and needed to facilitate improvement. This process allows teachers to make better decisions about instruction based on the knowledge gained through such study (Murphy & Lick, 2005). The ability to engage in the study of best practices with peers is a critical component of the PLC framework (Matherson & Windle, 2017). It provides teachers with an opportunity to reflect on the work, which Mintzberg (2004) argues, is the learning. Accordingly,

Collaborative teams in a professional learning community always approach a problem or issue by first building shared knowledge – studying the *best that is*

known about the topic being addressed – and making decisions based on what will be best for student learning. (Eaker & Keating, 2012, p. 89)

It is when teachers learn together in teams that efforts to improve instruction can take root and succeed (Darling-Hammond & Richardson, 2009).

High-quality PLCs afford teachers the opportunity to build trust, study together, and engage in discussion about best practices (Eaker & Keating, 2012; Kensler, Caskie, Barber, & White, 2009; Thacker, 2017). Such discussion should include debate, even disagreement, as they work together (Hord, Roussin, & Sommers, 2010). Teams must celebrate successes together and evaluate failures in their effort to improve by providing needed support to colleagues (Hord, Roussin, & Sommers, 2010). PLCs should provide an environment in which teachers can have an open dialogue about challenges and opportunities to work together to find solutions (Jacobs & Yendol-Hoppey, 2010).

PLCs cannot be limited to reviews of student achievement data. In PLCs, teachers should consider all aspects of teaching and learning as they work towards deeper understanding of successful instructional practices (Sims & Penny, 2015; Aguilar, 2016). Time must be provided for teachers to visit the classrooms of their peers, to observe and to discuss observations (Hord, Roussin, & Sommers, 2010). Opportunities for teachers, just as any other professionals, to meet and discuss professional practices can be of great benefit (Baccellieri, 2010). Schmoker (2006) posits, “the majority of ‘incompetent’ teachers are potentially quite competent if given the opportunity to work in a redefined system with colleagues and with cooperative supervision” (p. 28). PLCs provide the structure, time, and collegial interaction that can lead to the increased individual capacity of teachers and to systemic organizational improvement through collective capacity building (Fullan, 2008; Wells & Feun, 2013).

Supports and shared leadership.

Collaboration and teaming require organizational support structures to be successful. Educational leaders wanting to utilize professional learning communities must have an awareness of the supports needed to sustain them. DuFour and Fullan (2013) noted, “The transformation from a culture of isolation to a culture of collaboration does not happen without ongoing support from the system” (p. 68). Support includes such considerations as providing time for teachers to collaborate, review instructional strategies, and consider influences on student learning (Caskey & Carpenter, 2012; Supovitz & Christman, 2005). Drago-Severson (2009) offers the following as the supports needed for successful teaming as required in PLCs,

1. Allocating time (during the school day and year), support and parameters to focus on specific tasks (e.g., for teachers, the focus would be student learning)
2. Clarifying the purpose and product of collaboration (e.g., creating a clear objective, being explicit about expectations and questions)
3. Inviting team members to discuss how they will work together:
 - a. Developing procedures for how the team will operate (starting and ending on time, attending all meetings)
 - b. Defining consensus (all team members participate, equal distribution of workload)
 - c. Developing an assessment for team effectiveness (articulating and exploring reasoning)
 - d. Discussing how team members will resolve conflicts

4. Establishing “SMART goals: Strategic and specific, Measurable, Attainable, Results-oriented, and Time bound” which enable teams to identify and pursue specific, measurable, performance goals
5. Giving and learning from feedback that is relevant to practice
6. Securing time for celebrating improvements by conveying that a difference is being made. (p. 74)

PLCs consist of regularly scheduled meetings for teachers and other staff to review student achievement data and make needed adjustments to instruction (Caskey & Carpenter, 2012; Schmoker, 2006). As such, providing teachers with time to meet is essential to PLCs (Johnston, Knight, & Miller, 2007). A common purpose is another needed support for PLCs (Drago-Severson, 2009). A common purpose unites colleagues and clarifies the overall objective of the work (Senge, 2012). Next, teachers in PLCs must establish guidelines for working together (Drago-Severson, 2009). Hord, Roussin, and Sommers (2010) write, “In a true PLC, open dialogue, discussion, and debate occur regularly” (p. 121). Teachers in PLCs must work together with support of school administrators to ensure the culture supports such collegial dialogue and that all teachers are afforded opportunities to participate.

Teachers in PLCs must also have the autonomy to establish improvement goals connected to student learning that are specific and that allow for progress to be measured (DuFour, 2002). Another component of successful teaming is the development of collegial relationships in which teachers discuss practice, observe one another, and offer and receive feedback (Drago-Severson, 2009). Finally, all PLC participants must make time to celebrate successes (Drago-Severson, 2009; Hord, Roussin, & Sommers, 2010). The presence of these supports will ensure PLCs become more than regularly scheduled meetings. They will become a

time when new and innovative practices can emerge (Zepeda, 2008). Judith Warren Little, in a collection of essays, shares the following about organizational supports needed for collaboration,

For teachers to work often and fruitfully as colleagues requires action on all fronts. The *value* that is placed on the shared work together must be both said and shown. The *opportunity* for shared work and shared study must be prominent in the schedule for the day, the week, the year. The *purpose* for the work together must be compelling and the task sufficiently challenging. The *material resources and human assistance* must be adequate. The *accomplishments* of individuals and groups must be recognized and celebrated. (as cited in Lieberman, 1990, p. 188)

When the appropriate organizational support structures exist, teachers can begin to work together to improve student learning outcomes. School leaders must be aware of their role in ensuring the needed supports are available (Gray, Mitchell, & Tarter, 2014; Thessin & Starr, 2011).

In addition to the support required for PLCs to be highly effective, shared leadership must be implemented and sustained over time. The research demonstrates that individual components of the PLC strategy cannot be implemented effectively in isolation of the others. Since the purpose of this review is to better understand the relationship between participation in a PLC and the ability of teachers to make decisions related to the implementation of instructional strategies and practices, it is crucial to understand how shared leadership fits into the overall PLC framework (Murphy, 2005). Each of the other characteristics provides for the development and enrichment of the people in the organization. Shared leadership is the linchpin in allowing for each person in the organization to participate meaningfully in decision-making processes (Kennedy, Deuel, Holmlund, & Slavitt, 2011). The type of collaboration that occurs in a PLC can be a catalyst for changing the culture of schools. Research conducted by Kennedy, Deuel,

Nelson, and Slavit (2011) suggests that when school administrators, teachers, and other staff in a school begin to engage in discussion and learning focused on student achievement, the culture of the school changes. The school culture that emerges is one in which new ideas are embraced and the need for change is understood and accepted (Kennedy, Deuel, Nelson, & Slavit, 2011).

As the re-culturing process evolves, leadership within a school becomes more distributed. A distributed or shared leadership approach recognizes the value of an organization's human capital and provides the necessary foundation for addressing critical issues within the organization. A distributed leadership approach provides a framework that allows everyone in the organization an opportunity to participate, contribute, and lead (Spillane, Halverson, & Diamond, 2004). Kennedy, Deuel, Nelson, and Slavit (2011) postulate the shared leadership model replaces a more hierarchical organizational structure in which a single administrator makes all the decisions. The reliance on a single person to make all the decisions in a school is neither practical nor sustainable due to the complexity of the work that must be done to ensure all students are provided with optimal learning opportunities (Kennedy, Deuel, Nelson, & Slavit, 2011). Schlechty (2009) writes, "Enhancing the capacity of leaders to lead in a participatory way and developing policies and procedures that encourage participatory leadership are essential capacity-building activities" (p. 231).

The ability of teachers to have autonomy as it relates to professional development is critical (Elias & Merriam, 2005; Knowles, Holton, & Swanson, 2005; Landeau, VanDorn & Freeley, 2009; Linder, Post, & Calabrese, 2012). The extent to which teachers achieve autonomy is dependent upon the ability of school leaders to cultivate and support a decision-making model within the school based on the principles of participatory leadership (Gray, Mitchell, & Tarter, 2014; Katzenmeyer & Moller, 2001; Wilson, 2016). Schmoker (2006) suggests improvement in

a school is dependent upon the willingness of school leaders to work collaboratively with teachers to improve instruction. Likewise, Zepeda (2008) asserts that school leaders must be willing to relinquish power to establish a successful learning organization model. In other words, the structure needed to promote ongoing school improvement is not hierarchical (Glickman, 1993; Jenlink & Jenlink, 2008).

As noted in a study about the perceptions of middle school teachers, a more democratic and collaborative structure results in greater trust in school leaders and colleagues (Kensler, Caskie, Barber, & White, 2009). Effective PLCs are contingent upon a participatory approach to decision-making within a school (Kanold, 2011). Kanold (2011) explains that in a PLC framework participants are mutually accountable and are empowered to act based on the vision; not on top-down authority and management. As the ability of teachers to participate in decision-making processes increases, the need for shared leadership within a school is demonstrably increased (Huffman & Hipp, 2001). Therefore, it is necessary for school administrators to recognize this shift and work to prepare all staff to lead in authentic and collaborative ways (Gray, Mitchell, & Tarter, 2014).

School administrators must be able to lead effectively in a collaborative culture in which high-performing teams are engaged and responsible for the work that is to be done (Eaker & Keating, 2012; Stein, Macaluso, & Stanulis, 2016; Wilson, 2016). Determining the work that is to be done must also be the collective responsibility of the school staff (DuFour & Fullan, 2013; Senge, et al., 2012). Successful change in schools “requires multiple layers of leadership roles” (Senge, et al., 2012, p. 323). A shared leadership model ensures “that when students are not demonstrating an efficacious or enthusiastic approach to learning, the pressure is not solely on one teacher” (Elbousty & Bratt, 2010, p. 6). Rather, it is incumbent upon all school staff to work

together to seek solutions (Elbousty & Bratt, 2010). To sustain this type of organizational culture and continue to improve pedagogical practices, it is imperative that teachers participate in PLCs (Griffith, Massey, & Atkinson; 2013). Knight (2011) notes, “When leaders do not honor teachers’ voices, telling them to implement step-by-step programs or practices without asking for their thoughts or suggestions, they communicate the message that they do not trust teachers to think for themselves” (p. 35). The PLC structure provides a way to ensure teachers are included in decision-making processes (Erkens, et al., 2008).

Teacher leadership and decision-making.

As schools shift from traditional hierarchical structures and begin to embrace more lateral structures that support teaming and PLCs, the need for leadership to be distributed becomes paramount (Murphy, 2005). Leadership in such a lateral structure has less to do with formal management roles and responsibilities and more to do with colleagues working together to improve practice and to implement instructional strategies to achieve common goals (Murphy, 2005; Warren, 2016). Forster (1997) captures the notion of teacher leadership as follows: “Teacher leadership may be broadly defined as a professional commitment and a process which influences people to take actions towards changes and improved practices that enable achievement of shared educational goals and benefit the common good” (p. 88).

Teachers may assume leadership responsibilities in a school within the PLC framework in ways such as leading professional learning sessions, working with other teachers to learn ways to improve practice, sharing their expertise with colleagues, and mentoring new teachers (Drago-Severson, 2009). Leadership roles should be carefully selected as teachers may provide effective leadership in some areas, but not others (Scornavacco, Boardman, & Wang, 2016). Additionally, teachers can provide leadership to improve PLCs, programs, and processes by providing

feedback about needed supports and working to implement new strategies (Drago-Severson, 2009; Mangin, 2016).

Murphy (2005) reports the willingness of teachers to assume leadership roles is contingent upon their having a positive relationship with the school principal. Teacher leadership is contingent upon the willingness of the principal to create leadership opportunities (Smith, Hayes, & Lyons, 2016). The principal can create a culture that ensures teachers will have a willingness to accept leadership roles within a school when the process is formalized, when value is placed on collaboration, and when needed supporting structures are in place (Gray, Mitchell, & Tarter, 2014; Wilson, 2016).

A shared leadership methodology combined with an organizational structure that allows teachers to develop leadership skills through expanded leadership opportunities is imperative. It is important to note that in the absence of expanded leadership and decision-making opportunities for teachers, “PLCs play out as another top-down method of controlling teachers and implementing reform initiatives” (Ferguson, 2013, p. 58). Hence, the success of PLCs is reliant upon teacher-driven collaboration (Ferguson, 2013). Ideally, a PLC framework undergirded by a shared leadership model supports the development of “a school culture in which teachers are fully empowered partners in shaping policy, creating curriculum, managing budgets, improving practice, and bringing added value to the goal of improving education for children” (Boles & Troen, 1996, p. 42).

Teacher decision-making and instruction.

Shavelson (1973) maintains, “Any teaching act is a result of a decision, either conscious or unconscious” and “The basic teaching skill is decision-making” (p. 144). This notion is supported in a study that focuses on decisions made by teachers (Griffith, Massey, & Atkinson,

2013). The study employed classroom observations to better understand the decisions teachers must make and the forces that influence such decisions (Griffith, et al., 2013). The research also considered the value of professional learning and participation in a PLC regarding decisions made by teachers (Griffith, et al., 2013). The study revealed teachers may respond in a more student-centered manner when the constraints of mandated curriculum and assessments are minimized (Griffith, et al., 2013). The authors concluded that PLCs, which promote knowledge about instruction and the use of best practices, increase the ability of teachers to make thoughtful decisions in the best interest of students (Griffith, et al., 2013). These findings support the importance of teacher autonomy related to their ability to make decisions about certain instructional strategies and the value of participation in a high-quality PLC.

Properly constructed and supported, PLCs provide a framework that affords teachers opportunities for decision-making regarding the selection of instructional practices and strategies. Effective teachers are purposeful about instructional decisions (Duke, Cervetti, & Wise, 2016). Teachers, in a purposeful manner, support each other in PLCs “by jointly developing curriculum goals and assessment strategies, implementing new teaching strategies, consulting over problems, analyzing achievement data together, and responding with improved instruction” (Ontario Principal Council, 2009, pp. 59-60). Providing an unceasing focus on the learning needs of students is the primary function of a PLC (DuFour & Marzano, 2011). DuFour and Mattos (2013) offer that to sustain that focus, PLC participants should use the following questions to guide their work,

- What knowledge, skills, and dispositions should all students acquire as a result of the unit we're about to teach?
- How much time will we devote to this unit?

- How will we gather evidence of student learning throughout the unit in our classrooms and at its conclusion as a team?
- How can we use this evidence of learning to improve our individual practice and our team's collective capacity to help students learn, to intervene for students unable to demonstrate proficiency, and to enrich the learning for students who have demonstrated proficiency? (p. 38)

The decisions that teachers must make are embedded in the process of answering these questions. In PLCs, “Teachers have a voice in determining the content they’ll teach, how they’ll sequence the content, which instructional strategies they’ll use, and how they’ll assess student learning” (DuFour & Mattos, 2013, p. 38). As Eaker and Keating (2015) offer, “Teachers in a PLC are constantly reminded that teacher autonomy and creativity are not only allowed but, in fact, encouraged – within the set parameters of collaboratively developed units of instruction” (p.55).

Conclusion.

In the preceding sections, the key concepts related to professional learning communities have been identified and examined. The review began with a way to conceptualize and define PLCs. There is a need for all educators to understand PLCs better as research links high-quality PLCs to improved classroom instruction (D’Ardenne, et al., 2013; Griffith, Massey, & Atkinson, 2013; Marsh, Bertrand, & Huget, 2015). PLCs are consistent with organizational models such as learning organizations (Senge, 2006). The construct of PLCs also parallels the tenets of total quality management in that all employees are responsible for engaging in continuous improvement (Evans & Dean, 2003). The PLC framework provides a practical way to establish an organizational culture that supports ongoing continuous improvement through team learning

and collective action to better serve the learning needs of students (DuFour & Marzano, 2011; Senge, et al., 2012).

Five characteristics associated with high-quality PLCs were also examined. The first of which is shared values and vision. Collectively agreed upon values define the fundamental beliefs of an organization and serve as a guide for decisions and behavior. Agreement on values provides the conditions in which people can commit to the organization at high levels (Kouzes & Posner, 2002). A shared vision statement represents what an organization aspires to become and nurtures commitment that results in action and not complacency (Senge, 2006).

A collaborative culture is the second characteristic of high-quality PLCs. A collaborative culture affords teachers the opportunity to investigate and discuss issues related to improving pedagogical practice (Hughes & Kristonis, 2006). As Fullan (2015) writes, “Cooperative cultures raise the capacity of nearly all individuals and enable the best to become even better and more helpful to others” (p. 120). In this way, collaboration is the catalyst for ongoing and systemic improvement within an organization.

A focus on examining outcomes to improve student learning is the third distinguishing characteristic of high-quality PLCs. PLCs exist to improve student learning outcomes (DuFour & Fullan, 2013; Eaker & Keating, 2012; Schmoker, 2006). In PLCs, teachers relentlessly study student achievement data and modify instruction as needed (Adams, Ross, & Vescio, 2008). In PLCs, there is a “shared commitment among faculty to improve the school so that all students learn” (Baccellieri, 2010, p. 121).

The fourth characteristic of high-quality PLCs, shared personal practice, is about teachers working together to improve their own effectiveness (Marsh, Bertrand, & Huget, 2015). Teachers collaboratively engage in study that increases their knowledge about topics aimed at

improving student learning outcomes (Murphy & Lick, 2005). PLCs provide teachers with a time to reflect on their work and construct new and better ways of providing instruction to students.

Supports and shared leadership is the fifth characteristic of high-quality PLCs examined in this review. PLCs require intentional support. Support includes time, clarity of purpose, clearly defined team processes, collective goals, feedback, and celebrations of successes (Drago-Severson, 2009). Shared leadership ensures that decision-making is distributed among all staff and is essential for achieving high-quality PLCs. All the components of high-quality PLCs are interconnected. As Gorton and Alston (2009) assert, “Assumptions and organizational preconditions for shared decision-making include shared goals or values, influence based on professional expertise, open communication and equal status among participants” (p. 29). PLCs provide the requisite conditions which allow for shared leadership and opportunities for teachers to engage in authentic decisions about instruction.

Finally, teacher leadership and how teachers who participate in PLCs use decision-making skills to improve instruction were reviewed. The establishment of PLCs is predicated on the development of a collaborative culture in which leadership is distributed throughout the school. For instructional improvement to occur, teachers must assume leadership responsibilities (Charner-Laird, Ippolito, & Dobbs, 2016). The most important of which involves modifying and adapting instruction to better meet the learning needs of students. The PLC framework offers teachers opportunities to collaborate to improve instruction.

Collectively, the five characteristics of high-quality PLCs provide the conditions in which educators can work together in a sustained and systemic manner to improve instruction and student achievement. As DuFour, DuFour, Eaker, and Many (2010) remind us, “The very essence of a learning community is a focus on and commitment to the learning of each student”

(p. 11). PLCs provide job-embedded professional learning for teachers thereby increasing “the effectiveness of teaching quality, which results in higher student outcomes” (Hord, Roussin, & Sommers, 2010). The job-embedded nature of these professional learning experiences provides teachers with increased opportunities for leadership and decision-making. Accordingly, the PLC framework must be undergirded with a shared leadership approach to school governance. In such an environment, teachers may participate meaningfully in decisions that can improve student learning opportunities and outcomes.

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2 TEACHER PERCEPTIONS OF PROFESSIONAL LEARNING COMMUNITIES AND DECISION-MAKING

The purpose of this study was to gain an in-depth understanding of the perceptions of teachers participating in professional learning communities (PLCs) regarding their ability to select and implement instructional strategies. This research is an area in which further study was needed, as the decisions teachers make have significant influence on student learning outcomes (Hattie, 2003). The preceding review of literature revealed much about the need for (a) collaboration, (b) shared leadership, (c) shared leadership models, and (d) organizational strategies to support and sustain participatory leadership. There is, however, limited research that expressly examines the perceptions of teachers and their ability to utilize decision-making skills related to the selection and use of instructional strategies.

Lateral organizational structures such as PLCs have the potential to increase levels of engagement and autonomy among teachers. This research sought to better understand the connection between this lateral organizational structure that is intended to provide job-embedded professional learning and the perceptions of teachers relating to their ability to make decisions about instructional strategies designed to improve student learning and student learning outcomes. Thematic analysis was used to identify patterns within the data collected (Boyatzis, 1998). Data collection methods included observations of PLC meetings, teacher interviews, and a review of selected artifacts. Theories related to adult learning and organizational change provided the foundation for this study.

Theoretical framework.

The PLC framework is consistent with Malcom Knowles' (1980) concept of andragogy, an adult learning theory. Elias and Merriam (2005) state that "andragogy is basically a

humanistic theoretical framework applied primarily to adult education” (p.132). Andragogy emphasizes the role of the learner and self-directed learning (Knowles, Holton, & Swanson, 2005). Knowles, Holton, and Swanson (2005) identify the following components of the andragogical model:

- The need to know,
- The learners’ self-concept,
- The role of the learners’ experiences,
- Readiness to learn,
- Orientation to learning, and
- Motivation.

The first component of the model, the need to know, emphasizes the need of adults to understand why they need to know something before devoting time to learn (Knowles, Holton, & Swanson, 2005). The next component, the learners’ self-concept, is related to the need for adults to make their own decisions (Knowles, Holton, & Swanson, 2005). As Elias and Merriam (2005) write, “Learning that is most meaningful capitalizes upon the self-directed, autonomous nature of adults” (p. 133). Since the self-directed approach to learning is the method most adults choose, it is a critical part of understanding adult learning theory (Merriam & Brockett, 2007). The third component, the role of the learners’ experiences, implies that any time “experiences are ignored or devalued, adults will perceive this as rejecting not only their experience, but rejecting themselves as persons” (Knowles, Holton, & Swanson, 2005, p. 67). The fourth component, readiness to learn, suggests that adults become ready to learn once there is a recognized need to learn (Knowles, Holton, & Swanson, 2005). The fifth element of the model, orientation to learning, identifies the need for a “task-centered or problem-centered orientation to learning”

(Aguilar, 2016). Moreover, “The deepest and most profound learning occurs through doing – by taking action, seeing what works and what doesn’t and trying again” (DuFour & Fullan, 2013, p. 27). The last component of the model is motivation. Adults do respond to external motivators, but are mostly intrinsically motivated as it relates to the desire to learn (Aguilar, 2016; Knowles, Holton, & Swanson, 2005).

Eaker and Keating (2015) explain, “Schools that function as professional learning communities embrace the assumption that improved student learning is inexorably linked to improved adult learning” (p. 19). It is this critical link between adult learning and student learning that PLCs capitalize upon. The embedded nature of adult learning within the PLC framework and a focus on student learning provide the conditions in which instruction can improve (Mirci & Hensley, 2010). This underscores the need for school administrators to understand adult learning theory and its relationship to improved student learning.

The PLC framework establishes a mechanism for ensuring continuous improvement within an organization (Kanold, 2011). Schein (1992) asserts as it relates to change theory, “all human systems attempt to maintain equilibrium and to maximize their autonomy vis-à-vis their environment” (p. 298). Moreover, “If any part of the core structure is to change in more than incremental ways, the system must first experience enough disequilibrium to force a coping process that goes beyond just reinforcing the assumptions that are already in place” (p. 298). Change within an organization is a process of unfreezing, cognitive restructuring, and refreezing (Lewin, 1947). Evans (1996) offers, “Unfreezing is a matter of lessening one kind of anxiety, the fear of trying, but first of mobilizing another kind of anxiety, the fear of not trying” (p. 56). PLCs provide a framework for ensuring organizational assumptions are challenged which creates disequilibrium and sets the conditions for needed changes (DuFour, DuFour, & Eaker, 2008;

Lewin, 1947). Further, the PLC structure provides time for reflection on the work which allows for needed changes to proceed (Mintzberg, 2004; Schein, 1992). The framework allows for refreezing to occur which allows the changes to become embedded processes within the organization (Lewin, 1947). Resultantly, there is a need for such structures as PLCs that are aimed at increasing teacher autonomy as it relates to responding to the needs of students based on the selection of appropriate instructional strategies and practices.

The adult learning theory and organizational change theory examined in the preceding will help to inform this research. Knowles (1980) further explains the interrelatedness of adult learning theory and change theory,

One of the misconceptions in our cultural heritage is the notion that organizations exist purely to get things done. This is only one of their purposes; it is their work purpose. But every organization is also a social system that serves as an instrumentality for helping people meet human needs and achieve human goals. In fact, this is the primary purpose for which people take part in organizations – to meet their needs and achieve their goals – and when an organization does not serve this purpose for them they tend to withdraw from it. So, organizations also have a human purpose. (p. 107)

As it relates to andragogy, job-embedded learning that is connected to the work should be of great value to teachers. The learning that takes place within PLCs should support the ability of teachers to make informed decisions about the selection of instructional strategies. Moreover, such autonomy will make the organization nimble and allow teachers the opportunity to make meaningful decisions about instructional strategies employed in their classrooms. These

incremental changes are necessary as it relates to change theory and the concept of sustained continuous organizational improvement efforts.

Methodology

A qualitative research design was selected for this study. Qualitative research relies on locating the observer or researcher in a specific situation to gather data (Denzin & Lincoln, 2005). Merriam (2009) writes, “Qualitative researchers are interested in understanding how people interpret their experiences, how they construct their worlds, and what meaning they attribute to their experiences” (p. 5). As such, “This means qualitative researchers study things in their natural settings, attempting to make sense of, or interpret, phenomena in terms of the meanings people bring to them” (Denzin & Lincoln, 2005, p. 3). This qualitative approach is well suited for the intent and design of this study.

There are five commonly used approaches to qualitative research which include ethnography, grounded theory, case studies, phenomenological research, and narrative research (Creswell, 2007). A case study design was used for this enquiry as the research was conducted at a single location and involved a common group of participants. As Creswell (2007) explains, case study research “explores a bounded system (a *case*) or multiple bounded systems (cases) over time, through detailed, in-depth observations, interviews, involving *multiple sources of information* (e.g., observations, interviews, audiovisual material, and documents and reports), and reports a case *description* and case-based themes” (p. 73). Merriam (2009) points out, “Case study has proven particularly useful for studying educational innovations, evaluating programs, and informing policy” (p. 51). Merriam (2009) states that a case study is “an in-depth description and analysis of a bounded system” (p. 40). Further, “a qualitative case is an intensive, holistic description and analysis of a single instance, phenomenon or social unit” (Merriam, 1998, p. 17).

This study fits these criteria as the setting of the study was a single elementary school during a seven-week period beginning in February and ending in April of the 2016-17 school year. Individual interviews, observations, and the review of certain artifacts were used to provide multiple sources of data to allow for validation of the data collected (Merriam, 2009).

Research question.

The research question for the study was as follows: How do fourth and fifth grade teachers involved in professional learning communities describe their ability to utilize decision-making skills related to the selection and use of instructional strategies in classrooms in one suburban elementary school? The following guiding questions directed the study:

1. How do fourth and fifth grade teachers describe the relationship between PLCs and collaboration and shared decision-making?
2. How do fourth and fifth grade teachers describe the process of collaboration and shared decision-making within PLCs?
3. How do fourth and fifth grade teachers describe the relationship between participation in a PLC and their ability to improve instruction?
4. How do fourth and fifth grade teachers describe the impact of PLCs on student learning within their school?

Setting.

The site of the research study was an elementary school (PreK-5) located in a suburban school district. Approximately 19,000 students were enrolled in the school district and 770 students were enrolled in the school. At the time of the study, two administrators, thirty-eight classroom teachers, seventeen special education and support teachers, two instructional coaches, and other support and operational staff were employed at the school. During fiscal year 2017, the

percentage of students eligible for free or reduced-price meals was 92.28. The percentage of students eligible in the school district was 69.23.

The school and the school district have utilized learning communities as a primary strategy to attain increased student achievement and more effective teaching. At the time of this research study, the school had used a learning community model for over four years. In 2013, the school was recognized as a National Blue Ribbon School. The use of PLCs as a mechanism for evaluating instructional effectiveness was included as a component of the award application. The school was an ideal setting for better understanding the perceptions of teachers related to the effectiveness of certain aspects of PLCs.

Participants.

Participants were selected using the purposeful sampling method. This method of sampling allows the researcher to select participants who are most likely to provide the greatest understanding as it relates to the research question (Creswell, 2009). Participants in this study included fourth and fifth grade classroom teachers at a PK-5 suburban elementary school. All teachers selected were certified teachers who regularly participate in PLCs. The teachers in this study were responsible for providing instruction in select content areas and for preparing lesson plans. As these teachers were responsible for certain content areas, the sample allowed for the inclusion of teachers who worked together to improve instruction in a cross-curricular manner. Regular classroom teachers at these grade levels were also selected partially because of the wealth of student achievement assessment data. The state student assessment program requires end-of-grade tests in English language arts and mathematics at both grade levels and end-of-grade tests in science and social studies at the fifth grade. Students at these two grade levels are administered norm-referenced assessments at the beginning and end of the school year. In

addition, a variety of formative assessments are administered throughout the year. The teachers also have access to robust assessment software which allows for in-depth analysis and comparison across disciplines included in the assessment program making those data easily accessible for review.

Four fourth grade classroom teachers and six fifth grade classroom teachers were employed at the school at the time of the study. These ten prospective interviewees received letters (Appendix A) detailing the intent of the research and an invitation to participate. Six teachers agreed to participate in the interview component of the study; three fourth grade teachers and three fifth grade teachers. It is not known why the other teachers chose not to participate in the study. A consent form (Appendix B) was obtained from those teachers confirming their willingness to be included in the interview component. Table 1 below indicates that three of the six teachers had earned graduate degrees (two with master's degrees and one with an education specialist degree). The other three held bachelor's degrees at the time of the study.

Table 1

Educational levels of participants

Degree earned	Number of teachers
Bachelor's	3
Master's	2
Education Specialist	1

Table 2 reflects the years of teaching experience for each of the six participants. Half of the participants had two to five years of teaching experience, and the other three had eleven or more years of teaching experience. Two of the teachers had over twenty years of teaching

experience. The average number of years of experience was 10.33 among the interview participants.

Table 2

Participants' years of experience as a classroom teacher

Years	Number of teachers
0-1	0
2-5	3
6-10	0
11-15	1
16-20	0
>20	2

Data collection.

Data for this qualitative case study was collected from interviews, observations, and the review of related artifacts. It is recommended that data for case study research be collected from multiple evidentiary sources including documentation, archival records, interviews, direct observations, participant observation and physical artifacts (Yin, 2002). The collection of data from multiple sources allows for in-depth analysis of a bounded system (Creswell, 2007; Merriam, 2009). This multi-step data collection process provided data that could be triangulated resulting in meaningful and valid conclusions helpful to educators in establishing and sustaining high-quality PLCs (Creswell, 2012; Glense, 2011; Merriam, 2009). Prior to the collection of data, a meeting was held with the principal to discuss the intent and scope of the study, the identification and requirements for teacher participants, the logistics for interviews including time and space, the PLC meeting schedule, and the overall data collection procedures to be included in the study. The principal expressed support for the study.

Interviews.

Face-to-face interviews were conducted with the six classroom teachers who consented to be interviewed. The interviews were conducted in an office at the school and lasted a minimum of thirty minutes with no interview exceeding one hour in length. Collecting the interview data

from the six classroom teachers at grade levels four and five provided an opportunity to examine the research topic from multiple perspectives. The interviews were semi-structured. This interview format provides for a list of predefined questions and allows the researcher to pursue other topics and ideas that emerge during the interview process (Merriam, 2009).

The prepared interview questions were designed to elicit detailed accounts of the perceptions of those interviewed relative to their participation in a PLC and their ability to make decisions about the selection and use of instructional strategies. The questions were carefully constructed to ensure that responses addressed the research question and were open-ended to allow for elaboration of initial responses (Merriam, 2009). The interview questions and follow-up probes are contained in Appendix C (Glense, 2011). All interviews were recorded and were later transcribed to aid in the analysis of the data. Names were not associated with the transcripts to ensure confidentiality.

Observations.

Four observations of PLC meetings were conducted. Two observations occurred prior to the teacher interviews and two took place after the interviews. One fourth and one fifth grade PLC meeting was observed prior to the interviews, and one of each was observed after the interviews. Those meetings included all teachers on each grade level with the exception of one who was on leave. The purpose of the observations was to better understand the structure and focus of the PLC meetings at the school and to identify documents that might be helpful in validating themes (Merriam, 2009). During these meetings, the researcher was a non-participant observer (Merriam, 2009). Field notes were maintained during these observations. The field notes were compared to interview transcripts to validate themes.

Documents.

Selected lesson plans developed collaboratively by all fourth and fifth grade teachers were collected and reviewed. The lesson plans were designed to ensure that the learning needs of students were met. The lesson plans created during a two-week period following the initial on-site observations were reviewed. All weekly lesson plans identified the (a) standards associated with the lesson, (b) the learning goal, (c) essential questions, (d) specific instructional strategies, (e) requisite vocabulary, (f) checks for understanding, (g) opportunities for extension and remediation, and (h) an assessment plan. The lesson plans also delineated times for direct instruction, opportunities for students to collaborate, and time for independent practice. The information contained in the lesson plans made it possible to determine if collective decisions made within PLCs were reflected in the planning process.

PLC participants used a single document as a meeting agenda and planning tool. The documents identified SMART (Strategic and Specific, Measurable, Attainable, Results-Based, and Time-Bound) goals for the week, for the nine-week grading period, and for the school year. Goals were established for (a) English language arts, (b) mathematics, (c) social studies, and (d) science. Long-term goals were reviewed and new weekly SMART goals were established at each PLC meeting. Weekly goals were established after reviewing student assessment data and through unpacking the standards. Unpacking the standards is a process of “identifying what students will know (analyzing the nouns in the standard) and be able to do (analyzing the verbs)” (Drost & Levine, 2015). The review of lesson plans and documents containing weekly learning goals as developed by the teachers supplemented the interviews and observations (Merriam, 2009).

Data analysis.

Data collected included audio recordings, field notes from observations, and selected documents. Audio recordings of interviews were transcribed. Precautions were taken to ensure the confidentiality of the participants in this study (Creswell, 2012) and potentially identifiable information was not shared. All documentation was maintained in an electronic database and access was limited to the researcher.

Data collected were reviewed to identify common themes relevant to the research question and guiding questions. The interpretive practices of qualitative research allow for the identification of observable themes (Denzin & Lincoln, 2000). Thematic analysis was used to identify the themes. Thematic analysis allows for the encoding of qualitative data through the identification of themes within the data (Boyatzis, 1998; Braun & Clarke, 2006). Boyatzis (1998) defines a theme as “a pattern found in the information that at a minimum describes and organizes the possible observations and at a maximum interprets aspects of the phenomenon” (p. 4). Further, “The themes may be initially generated inductively from the raw information or generated deductively from theory and prior research” (p. 4). Braun and Clark (2006) identify six phases of the thematic analysis process which includes: (a) Becoming familiar with the data, (b) generating initial codes, (c) searching for themes, (d) reviewing themes, (e) defining and naming themes, and (f) producing the report. This data analysis method was well suited for this research as it allowed for the perceptions of participants to fully emerge in the findings of the research (Braun & Clark, 2006).

Member checks were used to validate themes. Member checks allow study participants the opportunity to validate findings and ensure that responses are accurately recorded (Merriam, 2009; Creswell, 2009). The member checking process was conducted after all the data were

analyzed and the themes from the research were identified. Finally, supporting data gathered using the aforementioned collection methods substantiated the common themes that were identified as well as other data collected and/or any sub-themes that emerged.

Results.

The data were analyzed to gain a better understanding of how teachers, who were involved in a professional learning community, described their ability to utilize decision-making skills to select instructional strategies. The primary source of data was interviews conducted with the six classroom teachers to elicit their perceptions about this topic.

Four primary themes emerged from the interviews and were validated by observations of meetings and by artifacts collected. Table 3 provides a summary of the themes that emerged from this research which included (a) shared personal practice, (b) the cyclical nature of improving student learning outcomes, (c) collaboration, and (d) teacher autonomy in the selection of instructional strategies. Each theme provided insight into how decisions were made, influenced, and improved through participation in a professional learning community.

Table 3

Themes

Research Question	Themes
How do fourth and fifth grade teachers involved in professional learning communities describe their ability to utilize decision-making skills related to the selection and use of instructional strategies in classrooms in one suburban elementary school?	<ol style="list-style-type: none"> 1. Shared personal practice 2. The cyclical nature of improving student learning outcomes 3. Collaboration 4. Teacher autonomy in the selection of instructional strategies

Theme 1: Shared personal practice.

The theme that was most prevalent in the data was the notion of shared personal practice. Shared personal practice is about teachers having opportunities to work together and collaborate in a structured setting to improve their teaching skills and effectiveness (Marsh, Bertrand, & Huget, 2015; Thacker, 2017). All the teachers interviewed identified shared personal practice as one of the greatest benefits of PLCs. Teacher A stated that PLCs “are there for us to learn from each other.” Teacher D defined PLCs as “teachers working together and sharing knowledge to ensure academic success for students.”

This idea seemed to be emphasized with the teachers falling into two distinct groups as it related to years of service. Each of the three teachers with less than three years of teaching experience noted the value of meeting regularly with teachers with more experience. This was evident in the observations of PLC meetings and was mentioned in some way during several of the interviews. Teacher B, who had approximately two years of teaching experience, commented specifically about the value of working with teachers who had more experience and an in-depth understanding of the standards.

Likewise, Teacher C, who also had approximately two years of teaching experience, valued the opportunity to learn teaching techniques from other teachers in the PLC setting and shared “the input of other teachers, especially veteran teachers, helps me a lot.” Teachers with less experience appreciated the job-embedded nature of PLCs that allows teachers to connect content knowledge with pedagogical knowledge (Griffith, Baumi, & Barksdale, 2015). Similarly, a teacher with more than twenty years of teaching experience noted the value of meeting with teachers with less experience. Teacher E valued the interaction with “young, energetic, excited teachers” who were “able to connect with the kids” in new ways. Teachers with varying degrees

of teaching experience benefited from participation in PLCs as it relates to the selection and use of instructional strategies. Each teacher interviewed expressed that they could assist other teachers in improving pedagogical practices through their contributions in PLC meetings, and, likewise, improve their own teaching practices through participation in a PLC.

Theme 2: The cyclical nature of improving student learning outcomes.

DuFour and Marzano (2011), define PLCs as a cyclical process in which educators work to improve learning outcomes for students. The teachers interviewed in this study also described a cyclical process used to ensure a focus on student learning outcomes. Teachers A and B discussed the importance of establishing weekly goals relative to student performance. This is the first step of the process. Teacher B indicated the process of establishing weekly student learning goals involves reviewing the standards and determining what students should know at the end of a specific lesson. Establishing such goals provides clarity relative to expectations for everyone on the team (Drago-Severson, 2009). Developing a common assessment for the lesson was also identified as a part of this first step. Teacher B indicated common assessments are created during PLC meetings. All teachers discussed the importance of developing assessments that allow teachers to check for mastery of standards.

The next step in the process, as described by the teachers interviewed, was to select the instructional strategies that are predicted to produce the best results for students. In PLC meetings, teachers discussed, in a comprehensive manner, which instructional strategies would be best for the students. Teacher F reported in this step “we decide how we are going to teach the standard.” The teacher further explained the process for selecting instructional strategies as collaborative and requiring a shared decision-making approach.

Reviewing student common assessment data is the next step in making certain the PLC is focused on student learning outcomes. In the following, Teacher A explains the benefits of common assessments:

I think it is very beneficial that we all give the same test. We can bring those tests back to the group and discuss. My kid missed number one. Did your kid miss number one? Was it the wording of the test? Was it the vocabulary they didn't understand? Did I teach it differently than you taught it? We are able to really narrow down what students need.

Teacher D shared that the assessment software used by the teachers allows the teachers to build common assessments, administer to students, and view results quickly. The students in the class can view their collective progress, and the teacher can analyze results in detail. The use of these assessment data to guide instructional decisions was also observed at PLC meetings. Once results are reviewed and gaps in instruction are identified, the last step in this recurring process is revising instruction to ensure mastery. All of those interviewed identified many or some of these elements necessary to maintaining a focus on student learning outcomes within the PLC framework.

Theme 3: Collaboration.

Collaboration emerged in the interviews as a foundational component of PLCs. Teacher B stated, "The heart of PLCs is collaboration and sharing information." Teacher F reaffirmed the sentiment by stating, "PLCs are all about collaborating and sharing ideas, sharing what works, and discussing the assessments." Teacher E explained:

If you're not collaborating, you're really not having a PLC, you're having a meeting. I think there is a big difference. You have to collaborate and work together to truly make it a professional learning situation.

All the interviewed teachers mentioned collaboration, and most identified it as a linchpin for effective PLCs. Aguilar (2016) writes, collaboration occurs when "Team members share their experience and expertise in ways that enhance team productivity and development" (p. 7). As teacher D indicated "it is more efficient to work with your team." All teachers interviewed recognized in some way the relationship between collaboration and improved team productivity, particularly as it related to planning instruction, constructing common assessments, and reviewing student learning data.

Several teachers interviewed referenced establishing student learning goals in PLC meetings. Weekly agenda documents reviewed included these weekly learning goals. Goals help to provide clarity about the purpose of collaboration and help to ensure the team remains focused (Drago-Severson, 2009). Teacher A shared, "If we are truly focused on being there for the task at hand, we get so much done." Teacher F stated PLCs that are "cohesive and focused, can influence student learning in a positive way." Goddard, Goddard, and Tschannen-Moran (2007) offer, "When teachers collaborate, they share experiences and knowledge that can promote learning for instructional improvement" (p. 891).

Theme 4: Teacher autonomy and the selection of instructional strategies.

All teachers interviewed indicated they had the autonomy to select and implement instructional strategies. In PLCs, teachers discuss and share instructional strategies. Teachers who participate in this collegial dialogue and professional learning become aware of new

instructional strategies and make better, more thoughtful decisions about the selection of instructional practices and strategies (Conzemius & O'Neill, 2002; Griffith, et al., 2013).

Several of the teachers interviewed described detailed and thorough discussions about which instructional strategies would be used in the classroom. Teacher F stated, "In PLCs, we look at what must be taught and we decide how we are going to teach it." Teacher E stated that teachers who participated in the PLC had complete autonomy to select instructional strategies and added:

That's the way it should be. We shouldn't be meeting and having someone telling us you're going to do it this way or that way. For me, PLCs are all about being professionals. We are sharing the information we have, and we are helping to support each other so that we are more effective teachers for our students.

There is an expectation of "collective autonomy" in PLCs in which teachers work together and are committed to improving instructional practices and student learning outcomes (Hargreaves & Fullan, 2012). This expectation of autonomy was evident in all teacher interviews.

Discussion.

In the following section, the themes that emerged during the analysis of the data are linked with components of the literature review, recent studies, the theoretical framework that guided the research, and to the research question and associated guiding questions. The four themes that emerged from the data collected in this study include (a) shared personal practice, (b) the cyclical nature of improving student learning outcomes, (c) collaboration, and (d) teacher autonomy in the selection of instructional strategies.

Teacher decision-making about instructional strategies in PLCs.

The purpose of this research study was to understand the decision-making process that fourth and fifth grade teachers go through as they develop instructional strategies for their classrooms. The teachers in this study reported having a great deal of autonomy as it related to the selection and use of instructional strategies through participation in a PLC. In fact, teacher autonomy was one of four primary themes in the findings of this study. PLCs do not hinder the ability of teachers to best serve the learning needs of students. Instead, participants reported their ability to select the best instructional strategies based on the needs of students was enhanced through participation in a PLC. In the following, the ways in which PLCs support the ability of teachers to make collective decisions about instructional strategies and pedagogical practices are further explored.

The relationship between PLCs, collaboration, and shared decision-making.

Participants were asked to describe the relationship between PLCs and collaboration and shared decision-making. Participants in this study identified collaboration as almost synonymous with PLCs as reflected by the identification of collaboration as one of the primary themes in the findings. The core of PLCs is a collaborative culture (Eaker & Keating, 2012). Erkens, et al. (2008) offers, “Those most effective in meeting the learning needs of their students will create collaborative cultures in which educators pool their knowledge, effort, and energy to learn from one another” (p. 57). All participants in this study recognized that effective PLCs required a collaborative culture.

Participants also noted the collaboration must be purposeful and guided by collectively established goals. Two of the participants noted that weekly instructional SMART (Strategic and Specific, Measurable, Attainable, Results-Based, and Time-Bound) goals were identified in PLC

meetings. Teams that establish their own goals have ownership of the goals (Aguilar, 2016). One participant said the grade level chair led the process; however, all teachers participated in setting the goal. Recent studies emphasize the importance of teacher leaders in PLCs (Charner-Laird, Ippolito, Dobbs, 2016; Smith, Hayes, Lyons, 2016).

Charner-Laird, Ippolito, and Dobbs (2016) observed participants in the study “repeatedly highlighted the active work of teacher leaders as paramount to moving their work forward strategically in ways that responded to the dynamics and desires of those within each team” (p. 992). PLCs provide a framework “in which teacher leaders can utilize their skills and experience” (Smith, Hayes, & Lyons, 2016). Effective PLCs require the presence of collaboration, teacher leadership opportunities and the autonomy of teams to establish goals (Gray, 2014; Kennedy, Deuel, Nelson, & Slavit, 2011). These elements were present in this study and further support the findings of other recent studies in that teachers identify collaboration and a shared decision-making framework to ensure teachers have the autonomy to make decisions about the selection and use of instructional strategies (Charner-Laird, Ippolito, & Dobbs, 2016; Smith, Hayes, & Lyons, 2016, Gray, 2014).

The process of collaboration and shared decision-making in PLCs.

The teachers in this study were also prompted to discuss the process of collaboration and shared decision-making in PLCs. A theme identified was the cyclical nature of improving student learning outcomes. The participants described a recurring process that included (a) reviewing learning standards, (b) developing and administering a pre-assessment, (c) developing common assessments, (d) establishing student learning goals, (e) selecting instructional strategies, (f) developing lesson plans, (g) delivering instruction, (h) administering common assessments, (i) reviewing student learning data, and (j) modifying and redelivering instruction

as needed based on the review of common assessment data (Figure 1). The review of student assessment data informs instruction and is critical to effective teaching (Duke, Cervetti, & Wise, 2016).

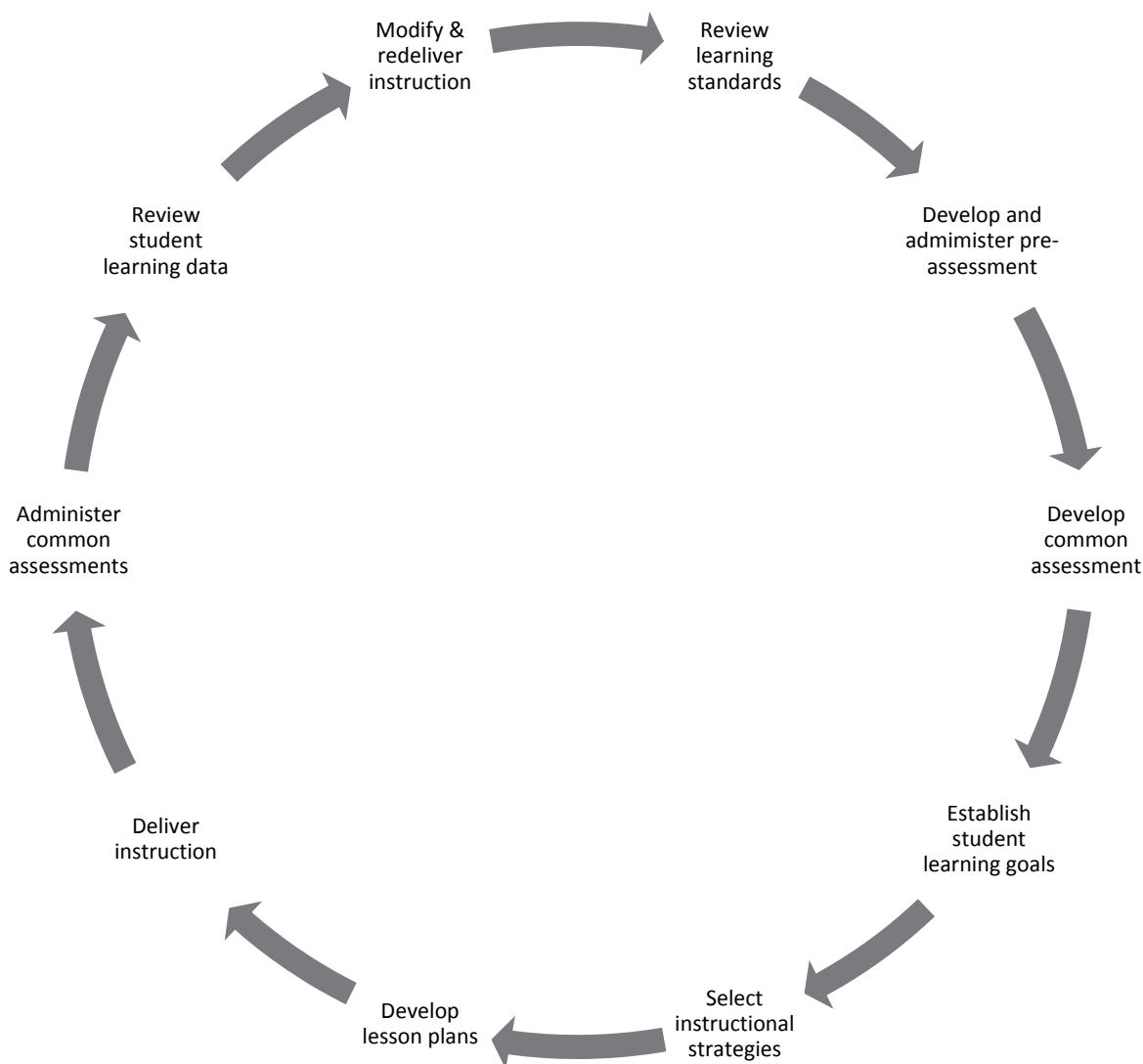


Figure 1. The cyclical nature of improving student learning outcomes, as described by study participants and observed during observations.

PLCs, as previously mentioned, can be defined as “an ongoing process in which educators work collaboratively in recurring cycles of inquiry and action research to achieve better results for the students they serve” (DuFour & Marzano, 2011, p. 22). The definition is consistent with the description of the collaborative process as defined by the teachers in this

study. The recursive nature of improving classroom instruction was also evident during observations of PLC meetings at the school. In these meetings, teachers were actively engaged in the collaborative process as described. Additionally, the lesson plans used by the teachers ensured the establishment of learning goals and served as a guide for improving student learning. Lesson plans clearly identified what students should know and what they should be able to do at the conclusion of the lesson. Lesson plans included information about misunderstandings students might be expected to have during instruction. Such a proactive and comprehensive planning process, as observed in PLC meetings and described by study participants, allowed teachers to select the instructional strategies that best addressed the learning needs of all students (Pitler & Stone, 2012).

The findings here identified a process aligned with the theoretical framework of the study that included change theory (Lewin, 1947; Schein 1992) and adult learning theory (Knowles, 2005). The theoretical frame for the study, change theory (Lewin, 1947) and adult learning theory (Knowles, 2005) connect the cyclical process of change and organizational improvement with the self-directed and autonomous nature of adult learners and the importance of job-embedded learning. Both theories serve as underpinnings to the creation and sustainment of a learning organization, particularly as it relates to the personal mastery and team learning dimensions of the model (Senge, 2006).

Effective PLCs and change are inextricable. The ongoing review of student learning data, which identifies the specific learning needs of students, can cause the organizational disequilibrium needed to ensure the necessity for change in teaching practices is evident. Once the need for a change in pedagogical practice is recognized, the PLC team must work together to build the shared capacity needed to make necessary improvements (Mirci & Hensley, 2011).

PLCs provide an organizational structure that supports this process in a long-term and systemic way. PLCs also capitalize on what is known about how many adults learn best. Adults often have a “task-centered or problem orientation to learning” (Aguilar, 2016). The work of a PLC is task-centered. In these ways, change theory and adult learning theory are intertwined in the PLC framework and support the development and sustainment of schools as learning organizations. The interconnectedness of these concepts is particularly important to school and teacher leaders. Marci & Hensley (2011) conclude that if leaders “recognize the interconnections between organizational change and adult learning, they may be able to become system thinkers capable of attaining sustainable change” (p. 27). Senge (2006) defines systems thinking as, “a framework for seeing interrelationships rather than things, for seeing patterns of change rather than static ‘snapshots’” (p. 68). The foundational elements of a PLC, as described in the preceding, provide a structure and a process for collaboration, a purpose for collaboration, a framework for building knowledge and improving instruction, and for making shared decisions about instruction.

PLCs and the ability of teachers to improve instruction.

Fourth and fifth grade teachers included in this study were asked to describe the relationship between participation in a PLC and their ability to improve instruction. The ability of the teachers interviewed to improve instruction is best described within the context of shared personal practice, another of the themes identified in the study. Every participant valued the opportunity to meet on a regular basis to discuss and work with colleagues to improve instruction. Teachers working together in this way capture the notion of shared personal practice (Marsh, Bertrand, & Huget, 2015). The value placed on this interaction transcended years of experience. Several early-career teachers valued the opportunity to discuss instruction with veteran teachers. Likewise, veteran teachers valued the ability of early-career teachers to engage

students in new ways. Matherson and Windle (2017) offer, “Every teacher, whether new or veteran, has something he or she can offer, and these talents should be utilized” (p. 31).

One concept commonly associated with PLCs and shared personal practice is the collective study of topics aimed at improving teacher effectiveness (Linder, Post, & Calabrese, 2012). Teachers interviewed noted this was not present in their PLC meetings; however, three of the teachers interviewed mentioned the role of the instructional coaches at the school. The school has two instructional coaches who routinely meet with teachers in grade-level PLC meetings. The instructional coaches provide redelivery of district trainings related to curriculum, instruction and assessments, provide teachers with feedback after completing focus walks, assist with lesson planning, meet with teams and individuals to discuss student performance data, model instructional best practices and lessons, provide staff members with current research, lead book studies, and facilitate teacher progress through the coaching cycle.

Certainly, instructional coaches can be effective in ensuring best practices in instruction are embraced by teachers and replicated throughout the school (Knight, 2007). Knight and Learning (2013) define an instructional coach (IC) as follows,

An IC is a second set of hands, a second set of eyes, a learning partner who collaborates with teachers to identify goals, suggests teaching practices to learn, explains and models the new practices, and observes and supports teachers as they master and integrate those new practices into their teaching and meet their goals.

(p. 9)

During one observation of a PLC meeting, one of the instructional coaches provided assistance to teachers who were planning student reviews of certain standards in anticipation of a statewide assessment. Teachers and the instructional coach discussed and suggested instructional strategies

as the group reviewed standards and assessment data to shore up gaps in student learning. In this manner, new ideas and teaching strategies are regularly provided to the teachers in the PLCs. In meetings such as PLCs, the instructional coach facilitates “the planning and debating of lesson designs and instructional strategies by groups of teachers and weighs in when differences arise” (Saphier & West, 2009, p.48). It was evident the work of the instructional coaches was a vital component of the PLC structure within the school. Ideally, PLC participants would also collectively engage in the study of other concepts and information (e.g. new instructional strategies, relevant books, research, and articles). Such collective self-directed study is a component of effective PLCs.

Impact of PLCs on student learning outcomes.

Finally, participants were prompted to describe the impact of PLCs on student learning within their school. There is mounting evidence that links PLCs with improved classroom instruction and student achievement (Banerjee, Stearns, Moller, & Mickelson, 2017; D’Ardenne, et al., 2013; Griffith, Massey, & Atkinson, 2013; Marsh, Bertrand, & Huget, 2015; Poekert, 2012; Ratts et al., 2015). As it relates to improved classroom instruction, the teachers who participated in the study all stated that participation in a PLC improved their effectiveness in the classroom. The notion of improved teacher effectiveness is linked to one of the four themes from the research, the autonomy of teachers to select instructional strategies. Not only did study participants report having the autonomy to make decisions about instruction, but they also perceived PLCs as a strategy for ensuring they made the best decisions through collaboration, dialogue with colleagues, and ongoing review of student learning data. In these PLCs, common assessments were used to “inform and improve the professional practice of its members” (DuFour, 2015).

A focus on common assessments and the opportunity to discuss with colleagues how particular instructional strategies might be used to improve student learning were what made PLCs of significant value to the study participants. When assessments “are common and intended for formative use, teachers can pool their collective wisdom in making sound instructional decisions based on the results” (Stiggins & DuFour, 2009). These reflective elements ensure that the work of teachers and other educators participating in PLCs never becomes stagnant, but remains a continuous process involving purposeful collaboration, collegial learning, and collective autonomy all designed to ensure the academic success of all students.

During an observation of a fourth grade PLC meeting, the participants reviewed formative assessment results to gauge effectiveness of the instruction. The assessments were completed by students earlier the same day. This access to real-time data allowed the teachers to make needed changes in instruction quickly and in a targeted manner. Teachers must work to identify and select the most appropriate instructional strategies (Marzano, 2009). The ongoing use of data, as observed in this PLC meeting, gives teachers the information needed to identify the instructional strategies needed. Teachers must have a willingness to adapt instruction based on assessment data and the learning needs of students (Rowe, 2007; Thomas & Green, 2015). Moreover, the collaborative nature of PLCs is an important part of using data to inform instruction as working in isolation “may preclude some of the learning that could occur when interacting with others around data” (Farrell & Marsh, 2016, p. 407). High-quality PLCs empower teachers which leads to the meaningful use of data to inform instruction (Farrell & Marsh, 2016). A culture of compliance may limit the willingness of teachers to explore the meaning of the data and make appropriate modifications to instruction (Farrell & Marsh, 2016).

The findings of a study that examined the links between the use of data and classroom

instruction yielded similar results in one aspect (Van Lare, 2016). In that study, one of the ways teachers used data to inform instruction was through discussions about what worked and what did not (Van Lare, 2016). Such discussions about student data were evident in this study through participant interviews and PLC meeting observations. Teachers worked together to identify student learning gaps and modify instruction accordingly to better meet the needs of students (Van Lare, 2016). The use of common assessments to inform instruction is vital to improving instructional effectiveness (DuFour & Marzano, 2011).

Implications for educational leaders.

This study highlighted the importance of effective school leadership. High-quality PLCs are dependent upon effective leadership at the school administrator and teacher level. The success of PLCs and schools is dependent upon the ability of the principal to empower and support teachers (Stein, Macaluso, & Stanulis, 2016). PLCs and autocratic leadership are not compatible (Wilson, 2016). A participatory approach to leadership is needed to empower teachers and to build a culture of mutual accountability as it relates to student achievement (Gorton & Alston, 2009).

School leaders must also be system thinkers. Thornton, Peltier, and Perreault, (2004) write, “To succeed, educators need to focus on making changes to the system, identifying high-leverage improvement, and aligning feedback with learning goals” (p. 227). Fullan (2006) expounds upon the idea of system thinkers and defines the type of school leadership now required, what he terms “system thinkers in action” (p. 114). He defines the term as follows,

These are leaders who work intensely in their own schools or districts or other levels, and at the same time connect with and participate in the bigger picture. To change organizations and systems will require leaders who get experience in

linking to other parts of the system. These leaders in turn must help develop other leaders with similar characteristics. In this sense, the main mark of a school principal, for example, is not the impact he or she has on the bottom line of student achievement at the end of their tenure but rather how many good leaders they leave behind who can go even further. (Fullan, 2006, p. 114)

The leadership abilities of principals must be framed by conceptual understandings about organizational structures and processes and the principles of adult learning, which, in turn, support the development of leaders throughout a school.

In addition to this type of leadership at the principal level, teacher leaders are a critical component of effective PLCs. The need for effective teacher leadership is connected to this study. Teachers become leaders by working with other teachers to accomplish goals and to bring the school closer to the realization of its vision (Warren, 2016). York-Barr and Duke (2004) write, “Developing trusting and collaborative relationships is the primary means by which teacher leaders influence their colleagues” (p. 288). This underscores the need for development opportunities for teacher leaders. Professional learning opportunities could help to ensure the sustainment of all the elements associated with high-quality PLCs. Ongoing and sustained professional learning aimed at supporting the development of teacher leaders would help to ensure that all elements of high-quality PLCs are understood and that teachers have the skills and abilities needed to support other teachers in creating conditions that provide for a collective focus on the vision and mission of the school, the adoption of best pedagogical practices, and data-driven decision making to improve student learning. Further, teacher leaders must be able not only to facilitate the decision-making process regarding the selection and use of instructional strategies, but must also assist in the development of student learning goals, help guide teams in

the study of topics needed to improve instruction, and understand the association between the work of a PLC and the development of a school culture focused on doing what is necessary to better student learning results.

Prior to implementing PLCs in a school, leaders must be able to successfully gauge the level of readiness among staff members to work together in this way. Kennedy, Deuel, Nelson, and Slavit (2011) suggest, “Some schools may be ready for shared responsibility, while others may need to build expertise, trust, and responsibility” (p. 23). Battersby and Verdi (2015) conclude, “PLCs are a long-term, sustainable commitment, and it may take years to see results, but the rewards will be mutually beneficial for students and teachers” (p. 28). There is a demonstrated need for schools to transform into learning organizations through implementation of PLCs and to ensure that all educators in a school are provided the opportunity to work with colleagues to contribute meaningfully to the academic success of all students.

Limitations.

This research provided insight into the perceptions of teachers as it relates to their ability to make decisions about instructional strategies through participation in PLCs; however, there are limitations to the study. First, the study occurred in the school district in which the researcher was employed. This relationship between the researcher and the school district could result in the inclusion of certain biases as it relates to the topic studied. Second, this case included teachers on two grade levels at one school. Finally, the study considered only the perceptions of teachers. The perceptions of other stakeholder groups were not included. Due to the limited scope of the study, the findings are not transferable and generalizable to other schools (Merriam, 2009).

Suggestions for future study.

Teachers in this study did have the autonomy to select and use instructional strategies and reported that their ability to select the best strategies was enhanced through participation in a PLC. Additional study is needed to validate that the perceptions of the teachers included in this study are representative of all teachers who participate in PLCs. This study supports the use of PLCs to improve teacher effectiveness. PLCs offer much promise as a comprehensive strategy for ongoing and systemic school improvement (DuFour, 2007). As the success of PLCs is largely dependent upon effective teacher leadership, research specifically focused on the needed supports to ensure the development of teachers who can lead effectively within the PLC framework is needed. Further study is needed regarding the ability of teachers to engage in decision-making processes beyond the selection and use of instructional strategies. For example, teachers should be involved in such processes as establishing a vision for the school and identifying long-range goals relative to student learning.

Conclusions

This study adds to the research surrounding PLCs, teacher decision-making in the classroom, and the importance of teacher leadership (Charner-Laird, Ippolito, & Dobbs, 2016; Thacker, 2017; Wilson, 2016). All characteristics associated with high-quality PLCs could be distinguished using the data collected. Those characteristics include (a) shared values and vision, (b) a collaborative culture, (c) a focus on examining outcomes to improve student learning, (d) shared personal practice, and (e) supports and shared leadership (Hord, 2004; The Center for Comprehensive School Reform and Improvement, 2009). Therefore, the value that PLCs provide to teachers and students was demonstrated. The findings indicated that study participants found PLCs to be instrumental in providing teachers not only with the collective autonomy to make

decisions about the selection and use of instructional strategies, but also in ensuring teachers selected the best strategies.

Four themes emerged from the study that support this key finding including shared personal practice, the cyclical nature of improving student learning outcomes, collaboration, and teacher autonomy in the selection of instructional strategies. The study underscored the need for leaders to better understand concepts related to organizational change and adult learning principles. School leaders and teacher leaders would also benefit from an understanding of the relationship between learning organizations and PLCs. These core concepts link the interrelatedness of adult learning and student learning. As Wilson (2106) notes, “Professional learning communities are a platform to cultivate professional growth and student achievement simultaneously” (p. 48). It is through such a process that colleagues in a school can work together to make certain the instruction provided best meets the learning needs of all students.

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APPENDICES

Appendix A: Invitation to Participate in the Research

Subject: Invitation to participate in the research project titled: PROFESSIONAL LEARNING COMMUNITIES AND TEACHER DECISION-MAKING

Dear (participant),

I am conducting interviews, as part of a research study to better understand how teachers who participate in professional learning communities describe their ability to utilize decision-making skills related to the selection and use of strategies to improve instruction. The initial interview will require a minimum of one, but no more than two hours. Follow-up interviews, if needed, will be limited to no more than one hour. The questions asked during the interview(s) are designed to capture your perspectives as it relates to the topic. Your responses to the questions will be kept confidential. There is no compensation for participating in this study; however, your participation will be a valuable addition to the research.

I will be contacting you in the next few days to discuss any questions you may have about the research. I have attached the consent form for your review.

Sincerely,

Michael C. Barr
Principal Investigator
Georgia State University

Appendix B: Consent Form

Georgia State University
Department of Educational Policy Studies

Professional Learning Communities and Teacher Decision-Making

Principal Investigator: Dr. Jami Berry
Student Principal Investigator: Michael C. Barr

I. Purpose:

You are being invited to participate in the above titled research study. The purpose of this study is to examine how teachers involved in professional learning communities describe their ability to utilize decision-making skills related to the selection and use of instructional strategies to improve instruction. You are being invited to participate because you are a fourth grade teacher or a fifth grade teacher at the school chosen for the research study. A total of 10 participants will be invited to participate in the overall study. As one of these individuals, your participation will require a minimum of one hour of time participating in interviews with the researcher; however, the interviews will require no more than three hours of your time participating in interviews with the researcher.

II. Procedures:

If you decide to participate, you will be asked to participate in at least one semi-structured interview with the researcher. The interviews will be held in a private location at your school and will be audio-recorded. The interviewer will conduct the first interview around specific questions. Each participant will meet with the interviewer at least once for a minimum of one hour but no more than two hours between September 2016 through April 2017 to respond to the initial interview questions. A follow-up interview may be conducted to further investigate and clarify themes that emerge during the initial interview. The follow-up interview will be limited to no more than one hour. In total, participants will spend no more than three hours being interviewed. The interviewer will record interviews with a digital recorder and transcribe all recordings within five days.

III. Risks:

In this study, you will not have any more risks than you would in a normal day of life.

IV. Benefits:

Participation in this study may benefit you personally, offering the opportunity to reflect on your participation in a professional learning community. Overall, the study seeks to better understand the connection between participation in a professional learning community and the ability of teachers to make decisions about selecting instructional strategies to improve instruction.

V. Voluntary Participation and Withdrawal:

Participation in this research is voluntary. You do not have to be in this study. If you decide to be in the study and change your mind, you have the right to drop out at any time. You may choose not to answer questions or stop participating at any time. Whatever you decide, you will not lose any benefits to which you are otherwise entitled.

VI. Confidentiality:

The identity of all participants, schools, and school system will be masked in the final document in order to maintain confidentiality. We will keep your records private to the extent allowed by law. Only the student principal investigator and the principal investigator will have access to the information you provide. Information may also be shared with those who make sure the study is done correctly (GSU Institutional Review Board, and the Office for Human Research Protection (OHRP). The transcribed data will be kept for 6 years after completion of the study before being destroyed. All paper records will be shredded and electronic media used to store data will be scrubbed after the files are deleted. Audio data will be erased and physically destroyed following transcription which will occur within 5 days of the interview. All recordings, transcriptions, and other information will be stored securely in a locked filing cabinet, in a locked office, specifically keyed so that only the student principal investigator will have access and a key. Your name and other facts that might point to you will not appear when we present this study or publish its results.

VII. Contact Persons:

Contact Dr. Jami Berry at 404-413-8258 or jberry2@gsu.edu or Michael C. Barr at 770-788-3129 or mbarr2@student.gsu.edu if you have questions, concerns, or complaints about this study. You can also call if you think you have been harmed by the study. Call Susan Vogtner in the Georgia State University Office of Research Integrity at 404-413-3513 or svogtner1@gsu.edu if you want to talk to someone who is not part of the study team. You can talk about questions, concerns, or suggestions about the study. You can also call Susan Vogtner if you have questions or concerns about your rights in this study.

VIII. Copy of Consent Form to Subject:

We will give you a copy of this consent form to keep.

If you are willing to volunteer for this research and be audio recorded, please sign below.

Participant

Date

Principal Investigator or Researcher Obtaining Consent

Date

Appendix C: Interview Questions

Interview Questions for Professional Learning Community Participants

1. Descriptor of interviewee.

Gender, age, education background, total years as a teacher, number of years in current district, number of years in current school, number of years in current position, experience outside of education.

2. How do you describe the relationship between PLCs and collaboration/shared decision-making?

- a. probe for examples of collaboration in PLCs
- b. probe for a rich and detailed discussion of how collaboration takes place in a PLC
- c. probe for examples of shared decision-making in PLCs
- d. probe for a rich and detailed discussion of how shared decision-making takes place in a PLC

3. How would you describe the relationship between participation in a PLC and your ability to influence student learning?

- a. probe for a rich and detailed discussion of how PLCs can impact student learning

4. How would you describe the process of collaboration and shared decision-making?

- a. probe for what works/what doesn't
- b. probe for a detailed discussion of processes used in PLCs to make decisions

5. How would you describe the impact of PLCs on student learning?

- a. probe for examples of collaboration related to language arts instruction
- b. probe for examples of teacher decision-making

- c. probe for examples of instructional strategies selected as a result of participation in a PLC

6. Some culminating questions:

Are there any other ideas that you would like to share that have not been covered?